

IS IT SAFE TO DRIVE?

Challenge

Severe weather can create hazardous driving conditions. During inclement weather, how can drivers get current information about Indiana roads? What are the road surface and sub-surface temperatures throughout the state? How can I tell if road conditions are safe?

The Indiana Department of Transportation (INDOT) maintains weather sensors and stations along the road network throughout the state. The data from those sensors was available to a select group of winter road operation planners to help manage road conditions. INDOT wanted to make this data available to local officials and the general public.

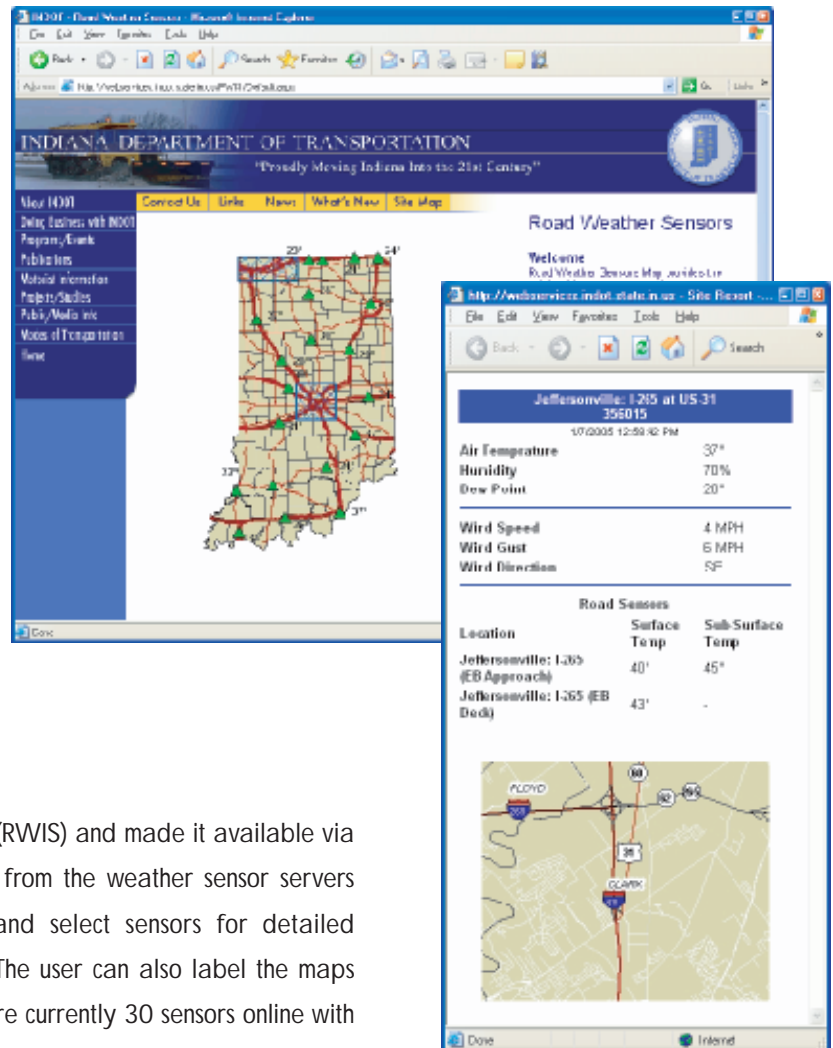
Action

INDOT developed the Road Weather Information System (RWIS) and made it available via a web portal at <http://rwis.in.gov>. The site pulls data from the weather sensor servers every fifteen minutes. Users can browse the maps and select sensors for detailed information, or view summary tables of all the sensors. The user can also label the maps with the most recent information from the sensors. There are currently 30 sensors online with new ones being added as they are installed.

This website is part of a larger effort to get decision-making data out to the general public, local and federal decision makers. A main priority is to take existing web pages and applications that are text-based and add meaningful mapping or GIS components to them.

Results

The RWIS portal is an efficient way to disseminate usable data, without requiring expertise in geography or computer sciences. It has been very popular, especially during extreme weather events. During a single large snow storm in December 2004, the site had tens of thousands of unique visitors with over one hundred thousand page hits for the five days snow was on the ground. Drivers were able to make intelligent, well-informed decisions about their travel plans.



INDOT's public website shows road conditions around the state every 15 minutes